S/020/62/145/004/017/024
B110/B144

Organosilicon compounds of the ...

80 - 100°C. Their composition and properties are indicated (Table). 5-nitro-furfuryl oxytrimethyl silane was obtained from ethereal solutions of 5-nitro-furfuryl alcohol, pyridine, and trimethyl chlorosilane. Silane reacts with H_2PtCl_6 in isopropyl alcohol to give furfuryl oxysilane. Dioxane containing 0.05 moles of H_2O hydrolyzes triethyl silane in the presence of H_2PtCl_6 to give triethyl silanol. Triethyl silane reacting with triethyl silanol in the presence of H_2PtCl_6 yields small amounts of hexaethyl disiloxane by anhydrocondensation. There is 1 table.

ASSOCIATION: Institut organicheskogo sinteza Akademii nauk LatvSSR (Institute of Organic Synthesis of the Academy of Sciences LatSSR)

SUBMITTED: March 12, 1962

Table. Furfuryl oxysilanes (R'-  - R'). Legend: (1) mode of production, (2) boiling point, °C, (3) pressure, mm Hg.

Card 2/12

GILLER, S.A., akademik; MEDNE, K.K.; VENTER, K.K.; GERMANE, S.K.; ZILE, A.Ya.

Tuberculostatic effect of certain derivatives of unsaturated aldehydes and ketones of the 5-nitrofuran series. Dokl.AN SSSR 144 no.1:108-111 My '62. (MIRA 15:5)

1. Institut organicheskogo sinteza AN Latv SSR. 2. AN Latv SSR (for Giller).
(Tuberculosis--Prevention) (Furan)

GILLER, S.A., akademik; BAUMANIS, E.A.; SOKOLOV, G.P.; GRINSHTEYN, V.Ya.

Synthesis and antimonoamine oxidase activity of alkyl hydrazides of 3-pyridazine carboxylic acid. Dokl.AN SSSR 145 no.2:440-442 Jl '62. (MIRA 15:7)

1. Institut organicheskogo sinteza AN Latviyskoy SSR. 2. Akademiya nauk Latviyskoy SSR (for Giller).
(Amine oxidase) (Hydrazides) (Pyridazinecarboxylic acid)

LUKEVITS, E.Ya.; ROMADAN, Yu.P.; GILLER, S.A., akademik; VORONKOV, M.G.

Organosilicon compounds of the furan series. Organosilicon compounds of furylcarbinols and 5-substituted furfuryl alcohols. Dokl.AN SSSR 145 no.4:806-808 Ag '62. (MIRA 15:7)

1. Institut organicheskogo sinteza AN Latviyskoy SSR. 2. AN Latviyskoy SSR (for Giller).
(Silicon organic compounds) (Furan) (Alcohols)

VOL'F, L.A.; MEOS, A.I.; KOTETSKIY, V.V.; GILLER, S.A.

"Letilan," biologically active alcohol fibers. Khim.volok no.6:16-18 '63. (MIRA 17:1)

1. Leningradskiy tekstil'nyy institut imeni Kirova (for Vol'f, Meos, Kotetskiy). 2. Institut organicheskogo sinteza AN LatvSSR (for Giller).

GILLER, S.A. [Hillers, S.], akademik

Problems of the harmonious development of Michurin's and molecular biology. Izv.AN Latv.SSR no.12:13-14 '63. (MIRA 17:3)

1. AN Latviyskoy SSR.

GILLER, S. A.; SALDABOL, N. O.; MEDNE, A. Ya.

2-Amino-4-(5-nitro-2-furyl)thiazole and its derivatives.
Zhur. ob. khim. 33 no.1:317-318 '63. (MIRA 16:1)

1. Institut organicheskogo sintoza AN Latviyskoy SSR.

(Thiazole)

MAZHEYKO, I.B.; GILLER, S.A.; GEMBITSKIY, P.A.; LEVINA, R.Ya.

Dipole moments of some derivatives of phenylcyclopropane.
Zhur. ob. khim. 33 no.5:1698-1699 My '63. (MIRA 16:6)

1. Institut organicheskogo sinteza AN Latviyskoy SSR i Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
(Benzene—Dipole moments)

SALDABOL, N.C.; MEDNE, A.Ya.; GILLER, S.A.

Synthesis and transformations of furan derivatives. Part 2: Derivatives of 2-amino-and 2-hydrazino-4-(5'-nitro-2-furyl) thiazoles. Zhur. ob.khim. 34 no. 5:1598-1601 My '64. (MIRA 17:7)

1. Institut organicheskogo sinteza AN Latviyskoy SSR.

KURGAN, B.V.; GILLER, S.A.; GRUZE, A.A.

β-Hydroxyethylhydrazides of furancarboxylic acids. Zhur. ob. khim. 34 no.8:2664-2667 Ag '64. (MIRA 17:9)

1. Institut organicheskogo sinteza AN LatvSSR.

MAZHEYKA, I.[Mazeika, I.]; AVOTA, L.; SOKOLOV, G.; GILLER, S.

Distribution of electron density in heterocyclic systems with two adjacent nitrogen atoms. Part 1: Dipole moments of some pyridazine derivatives. Zhur. ob. khim. 34 no.10:3380-3385 O '64. (MIRA 17:11)

1. Institut organicheskogo sinteza AN Latviyskoy SSR.

GAVAR, R.A. [Gavars, R.]; STRADYN', Ya.P. [Stradins, J.]; GILLER, S.A., [Hillers, S.], akademik

Electrochemical generation of free radical anions in the 5-nitrofuran series. Dokl. AN SSSR 157 no.6:1424-1426 Ag '64. (MIRA 17:9)

1. Institut organicheskogo sinteza AN LatvSSR. 2. AN LatvSSR (for Giller).

SOKOLOV, G.P.; GILLER, S.A., akademik; VORONKOV, M.G.

Reaction of organomagnesium compounds with 2,5-dimethoxy-2,5-dihydrofurans. Dokl. AN SSSR 158 no.3:675-678 S '64. (MIRA 17:10)

1. Institut organicheskogo sinteza AN Latviyskoy SSR. 2. AN Latviyskoy SSR (for Giller).

L 41162-65 EWT(m)/EPF(c)/EWP(j)/T Pc-4/Pr-4 RM
ACCESSION NR: AP5007166 S/0286/65/000/003/0038/0038

AUTHOR: Giller, S. A.; Kastron, Ya. A. 16 16 17 B

TITLE: A method for producing epoxy resin. Class 22, No. 167923

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 3, 1965, 38

TOPIC TAGS: condensation, epoxy resin

ABSTRACT: This Author's Certificate introduces a method for producing epoxy resin by condensation of bisphenol A with an epoxy compound and then hardening the liquid resin with shellac or m-phenylene diamine. In order to expand the selection of applicable materials, an ester of β-furylglycidic acid is used as the epoxy compound.

ASSOCIATION: none

SUBMITTED: 12Mar62 ENCL: 00 SUB CODE: GC, MT

NO REF SOV: 000 OTHER: 000

Card 1/1 mc

GAVAR, R.A. [Gavars, R.]; [illegible]

Recording of the spectra of electron paramagnetic resonance of short-living free anion radicals. Vav. zap. 31 no.1:41-45 '65. (MIRA 18:3)

1. Institut organicheskogo sinteza AN Latviyskoy SSR.

GILLER, S.A.[Gillers, S.], otv. red.; BLEYDELIS, Ya.Ya. [Bleidelis, J.], red.; BLYUGER, A.F.[Blugers, A.]red.; ZIDERMANE, A.A., red.; PRESS, B., red.; BRAMBERGA, V., red.; LIDAK. M.Yu.[Lidaks, M.], red.; KOVI, O., red.; SHUL'TS, I

[Cyclophosphane] TSiklofosfan; sbornik statei. Riga, Izd-vo "Znanie," 1965. 267 p. (MIRA 18:6)

1. Latvijas Padomju Socialistiskas Republikas Zinatnu Akademija. Organiskas sintezes instituts.

L 1328-66 EWT(1)/EWA(j)/EWT(m)/EPF(c)/EWP(j)/EWA(b)-2/EWA(c) RO/JK/RM
ACCESSION NR: AT5023365 UR/0020/65/164/001/0099/0102

AUTHOR: Giller, S. A. (Academician AN LatSSR); Vereshchagin, L. I.; Venter, K. K.; Korshunov, S. P.; Teirule, V. V.; Lolya, D. O.

TITLE: 2-Furyl and 5-nitro-2-furyl alkynyl ketones

SOURCE: AN SSSR. Doklady, v. 164, no. 1, 1965, 99-102

TOPIC TAGS: fungicide, antivirus agent, ketone, acetylenic ketone, furyl alkynyl ketone

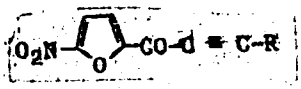
ABSTRACT: This work was undertaken in the course of a search for compounds with fungicidal and antiviral agents. Furyl alkynyl ketones had been previously prepared by the authors from the corresponding carbinols by oxidation with activated manganese dioxide. 5-Nitrofuryl arylalkynyl ketones were obtained by nitration of the corresponding ketones. The reaction conditions are dictated by the nature of the aryl group attached to the acetylene function. Ketones containing an unsubstituted phenyl group, or a phenyl group bearing electron-donating substituents are readily nitrated in acetic anhydride at -25C, without a catalyst. When the phenyl group bears electron-withdrawing substituents (Cl, Br), the reaction temperature must be raised to 0—5C, and catalytic amounts of sulfuric acid must be added. In all cases, selective nitration occurs, yielding 5-nitro-2-furyl ketones. In this

Card 1/2

L 1328-66

ACCESSION NR: AT5023365

manner, a series of ketones was prepared:



where R = phenyl, p-tolyl, p-chlorophenyl, m-bromophenyl, p-bromophenyl. The yields and physical constants of the above compounds and their semicarbazones are given in tabular form. The results of biological tests of the compounds obtained will be presented in a separate paper. Orig. art. has: 2 tables. [VS]

ASSOCIATION: Institut organicheskogo sinteza Akademii nauk LatSSR (Institute of Organic Synthesis, Academy of Sciences, LatSSR); Institute nefte- i uglekhimicheskogo sinteza pri Irkutskom gosudarstvennom universitete im. A. A. Zhdanova (Institute of Petroleum and Coal Chemistry Synthesis at the Irkutsk State University)

SUBMITTED: 05Apr65 ENCL: 00 SUB CODE: OC, GC

NO REF SOV: 005 OTHER: 006 ATD PRESS: 4103

Card 2/2

37229-66 EWT(m)/EWP(j) JW/RM

ACC NR: AP6015388 (A) SOURCE CODE: UR/0409/65/000/001/0011/0014

AUTHOR: Kurgan, B. V.; Giller, S. A.; Gruze, A. A.

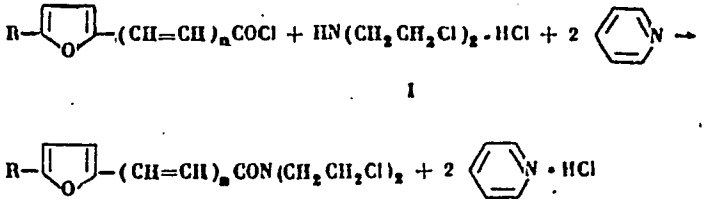
ORG: Institute of Organic Synthesis, Academy of Sciences, Latvian SSR, Riga (Institut organicheskogo sinteza Akademii nauk Latviyskoy SSR, Riga)

TITLE: N, N-bis(2-Chloroethyl)amides and N, N-bis(2-chloroethyl)hydrazides of carboxylic acids of the furan series

SOURCE: Khimiya geterotsiklicheskikh soyedineniy, no. 1, 1965, 11-14

TOPIC TAGS: hydrazine derivative, organic amide

ABSTRACT: A method for the preparation of both N, N-bis(2-chloroethyl)amides and N, N-bis(2-chloroethyl)hydrazides of carboxylic acids of the furan series was found to be the reaction of acid chlorides with amine hydrochloride (I) or hydrazine hydrochloride (II) in chloroform in the presence of a small excess of pyridine:

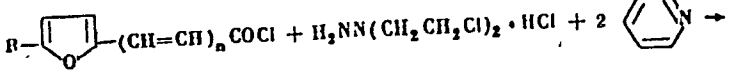


I

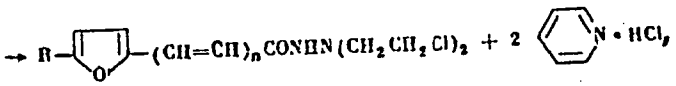
Card 1/2 UDC: 547.725+542.95+547.23

L 37229-66

ACC NR: AP6015388



II



R=H, NO_2; n=0,1.

The following compounds were synthesized: N-(5-nitrofuroyl)-N', N'-bis(2-chloroethyl)-hydrazine; N-(5-nitrofurylacryloyl)-N', N'-bis(2-chloroethyl)hydrazine; N-(furoyl)-N', N'-bis(2-chloroethyl)hydrazine; N-(furylacryloyl)-N', N'-bis(2-chloroethyl)hydrazine; N-(furoyl)-N, N-bis(2-chloroethyl)amine; N-(furylacryloyl)-N, N-bis(2-chloroethyl)-amine; N-(5-nitrofuroyl)-N, N-bis(2-chloroethyl)amine; and N-(5-nitrofurylacryloyl)-N, N-bis(2-chloroethyl)amine.

SUB CODE: 07/ SUBM DATE: 18Sep64/ ORIG REF: 001/ OTH REF: 012

Card 2/2 MLP

L 12070-66 EWT(m)/EWP(j)/T LIP(c) DS/WW/RM
ACC NR: AP6014716 SOURCE CODE: UR/0197/66/000/004/0024/0033

106
78
B

AUTHOR: Giller, S. (Academician AN LatSSR)
ORG: none
TITLE: New horizons in organic synthesis
SOURCE: AN LatvSSR. Izvestiya, no. 4, 1966, 24-33
TOPIC TAGS: biochemistry, synthetic material, quantum chemistry, organic semiconductor, drug, pharmacology, hormone, chemical bonding, solid state physics, molecular structure, physical chemistry, chemical synthesis, macromolecular chemistry, heterocyclic base compound, dielectric property
ABSTRACT: This state-of-the-art paper by S. Giller, member of the Latvian Academy of Sciences, describes recent developments in organic synthesis, future trends characterized by directional and dimensional reorientation, and the contribution of Latvian science in this field, as part of the Soviet scientific system. The paper was written in connection with the twentieth anniversary of the Latvian Academy of Sciences. According to Paul Walden, the recent trend of combining chemistry with biology and physiology for studying the structure of biocatalysts is being expanded in the second half of the twentieth century by including physical sciences in an effort to reach new horizons in organic synthesis. The new trend includes: physical methods for the study of structures of organic substances; quantum-mechanical concepts of existing molecular and even biological attractive forces which lead to the formation of real compounds, association compounds, larger aggregates, enzymes, antibodies, phages, viruses, and cellular structures.

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L 42070-66

ACC NR: AP6014716

5

The dimensional reorientation in organic synthesis includes new achievements in macromolecular chemistry through stereoregular polymerization, and large-scale industrial organic synthesis which calls for the solution of basic problems in chemical engineering (e.g., reactions in vapor and gas phase and in dynamic systems with limiting conditions and parameters).

The Latvian Academy of Sciences participated in the study of multi-electron conjugate compounds with developed p-electron systems, by using quantum-chemical calculations (method of molecular orbitals). Elmar Gren, a young scientist from the Institute of Organic Synthesis, completed calculations for various organic compounds in cooperation with the Spectroscopy Laboratory of Latvian State University.

The quantum-mechanical approach permits derivation of a general theory for correlating the structure of organic substances with their physical and chemical properties. It is expected that in the near future, quantum chemistry will make possible the calculation of definite biological properties of matter.

Another, extremely interesting aspect of the alliance of organic synthesis with solid-state physics is the preparation of organic materials with exceptional electrophysical and magnetic properties. Work in this field was carried out at the Latvian AS by a young scientist, Janis Freimanis. It is expected that this class of materials may reveal certain properties which may affect genetic processes of the living cell. Such research is being conducted together with a group of Belorussian geneticists headed by Academician Turbin.

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L 42070-66

ACC NR: AP6014716

The principle of polyassociation of organic compounds is used to manufacture organic semiconductors needed in the rapidly developing electronics industry. These organic substances should possess highly developed systems of conjugation and dense packing of the lattice, which results in lower intermolecular energy barriers to electron transfer. Several compounds with the required properties were synthesized, e.g., conjugated enamines, monomeric and dimeric systems, and polyassociated cross-linked compounds.

It was found that compounds in this category can form homogeneous vacuum deposited dense films several microns thick, which may be used in the preparation of microcircuits. Some of these compounds show high nonlinearity of volt-ampere characteristics and, to a certain degree, even stabilitron properties. The chemical structure of these compounds should contain exclusively linear hydrogen bonding in maximally planar molecular configurations. The formation of cross-linked associated structures tends to lower considerably, or even cancel, the above-mentioned properties.

Some of the synthesized compounds revealed relatively low dielectrical losses in a high-frequency electrical field. They have the advantage over polymeric coatings of being vacuum deposited (thin-film method).

A new polymeric material, a polyene, was developed at the Semiconductor Research Laboratory of Latvian State University in cooperation with Leningrad scientists. It is characterized by pronounced thermistor properties, large mean free-path value and long life of charge carriers.

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L 42070-66

ACC NR: AP6014716 10

Another important field of organic synthesis is the manufacture of effective synthetic drugs and preparations for use in agriculture. It should be noted that in spite of the existence of great numbers of highly qualified organic chemists in the USSR, there is a considerable lag in the production of improved and specific drugs, herbicides, and insecticides. This lag is inconsistent with the general progress of science in the Soviet Union, and can be explained only by erroneous concepts prevailing until fairly recently in the field of biological sciences ["Lysenkoism"].

Latvian scientists have synthesized 12 new improved drugs. For instance, three preparations from the "furagin" series are known to be the best drugs against specific infections. The following scientists participated in drug research: N. O. Saldabol, in the study of methyl-2-polyalkenals; K. K. Venter, in the chemistry of 5-nitrofuryl-2-polyalkenals, 5-nitrofuryl-2-polyalkenones, and acetylene-bond containing 5-nitrofuryl ketones; Ya. A. Kastronom, on the methodology for synthesis of nitrofuran penicillins; A. A. Berzin' in the first study of the alkylation of furan with olefins; G. P. Sokolov, in the study of the conversion of 2,5-dialkoxy-2,5-dihydrofurans; L. Ya. Avot, in the chemistry of pyridazine and its furan derivatives; and finally, Ya. P. Stradyn', in polarography of nitrofurans. Stradyn' was the first to achieve the electrochemical regeneration of long-lived nitrofuran free radicals.

Academician M. G. Voronkov, Corresponding Member of the Latvian Academy of Sciences, was the first to describe 1-arylsilatranes with exceptionally strong and specific physiological activity. It was found

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that 1-phenylsilatrane has extremely high selective toxicity (0.4 mg/kg for warm-blooded animals), and that open-chain analogs of silatranes have bactericidal and fungistatic properties. A new class of biologically active atranes was discovered (derivatives of germanium, titanium, vanadium, and molybdenum). These new compounds constitute a group of highly active contact insecticides. Their practical usefulness was confirmed in 1965 field tests.

Latvian scientists, together with Leningrad scientists A. I. Meos and L. A. Vol'f, initiated a new branch in organic synthesis, i.e., the preparation of polymeric fibers with antimicrobial properties. The basic idea here was the covalent bonding of macromolecules to organic bacteriostatic compounds. One of them, lethilan ["letilan"] polyvinyl alcohol acetalated with β-(5-nitrofuryl)acrolein protects wounds from infection and is gradually absorbed by the surrounding connective tissue. It is nontoxic, and protects against gram-positive and gram-negative bacteria, including staphylococci, trichophytone fungi, epidermophytone, candidal, simple lamblia, and trichomonads. Lethilan is the first antimicrobial fiber used for the manufacture of a wide assortment of medical supplies.

In 1965, the Laboratory for Amino Acids and Peptides (Gunar Chipen, director) of the Latvian Research Institute of Experimental and Clinical Medicine developed a new hormone: 5-valine-angiotensin P (aspangyl-aryinyl-valyl-histidyl-prolyl-parahydroxy-phenylalanine). This angiotensin is the strongest so far known, and doses of 10^{-9} g/kg show effect on blood pressure in one minute.

L 42070-66

ACC NR: AP6014716

Research in the field of synthetic models and analogs of nucleic acids yielded synthetic nucleosides. Such research is facilitated by the existence of the Experimental Plant headed by N. A. Sukut and M. S. Grinberg. In addition, The Latvian Plant of Biochemical Reagents, the largest biochemical plant in the world, is under construction at Olaine for the production of nucleic acids, nucleosides, and other biochemical products.

Among other achievements of Latvian science is the first development of methods for the synthesis of new heterocyclic systems in the pyridine, quinoline, azafluorenone, and acridine series, achieved by G. Ya. Vanag. He also discovered an entirely new type of neurotropic compounds, 2-aminophenyl derivatives of 1,3-indandiones. At the present time, methinedione and aphenedione are undergoing clinical tests. [ATD PRESS: 4254-F]

SUB CODE: 07, 11/ SUBM DATE: none

Card 6/6 af

L 44124-66 EWP(m)/EWP(j) WW/JH/RM

ACC NR: AP6030657 SOURCE CODE: UR/0020/66/169/006/1332/1334

AUTHOR: Anderson, A. A.; Yurel', S. P.; Shimanskaya, M. V.; Giller, S. A. 43 B
(Academician AN LatSSR)

ORG: Institute of Organic Synthesis, Academy of Sciences LatvSSR (Institut organicheskogo sinteza Akademii nauk LatvSSR)

TITLE: Vapor-phase contact deamination of polyfunctional amines

SOURCE: AN SSSR. Doklady, v. 169, no. 6, 1966, 1332-1334

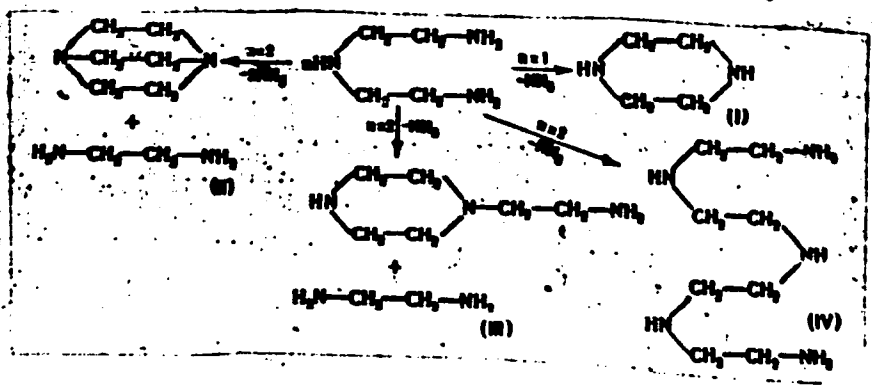
TOPIC TAGS: amine deamination, catalyst activity, kaolin, alumina, diethylenetriamine, ethanolamine, triethylenediamine, piperazine, pyrazine

ABSTRACT: Vapor-phase deamination of diethylenetriamine and dehydration of ethanolamine over kaolin, kaolin with 5% MoO_3, active alumina, and alumina with B_2O_3, P_2O_5, MoO_3, WO_3, and SiO_2 was studied at 300—500C to determine the effect of the catalysts on the reaction products composition and the catalyst selectivity. The yield and the composition of the catalyzate depend on both the catalyst present and the temperature. Gas-liquid chromatographic analysis of the reaction products showed that the composition of the catalyzate varied with both the catalyst present and temperature. The reaction product formed in the deamination of

Card 1/3 UDC: 541.128.13+547.415+547.861.2

L 44124-66
ACC NR: AP6030657

diethylenetriamine and its condensation with polyethylenepolyamines formed over kaolin contains 12 identified compounds. The reaction proceeds by the following mechanism:



The presence of ethylamine and pyrazine among the reaction products indicates the occurrence of dehydrogenation and hydrogenation processes in addition to deamination. Reactions III and IV prevailed at low temperatures (340—420C). Dehydrogenation commences at temperatures above 420C, and at temperatures above 460C, the main products undergo cracking. Conversion of the main products of deamination of diethylenetriamine was also studied. Among the reaction products, triethylenediamine was

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L 44124-66
ACC NR: AP6030657

found to be most stable. Alumina containing 5% MoO_3 was the most selective catalyst with respect to the formation of pyrazine, while triethylenediamine, ethylenediamine, and piperazine were not found among the reaction products formed over this catalyst. The addition of acid oxides to the catalyst has a positive effect on the conversion of diethylenetriamine into triethylenediamine. Orig. art. has: 2 figures. [PS]

SUB CODE: 07/ SUBM DATE: 21Dec65/ ORIG REF: 006/ OTH REF: 013/ ATD PRESS: 5072

awm
Card 3/3

GILLER, Ya.L.

X-ray characteristics of certain organic minerals. Min.sber.no.9: 296-300 '55. (MLRA 9:9)

1.L'vov. Gosudarstvennyy universitet imeni Ivana Franko.
(X rays) (Mineralogy, Determinative)

GILLER, Ya. L.

GILLER, Ya. L.: "X-ray structural methods of diagnosing the minerals of the granite group." Min Higher Education Ukrainian SSR. L'vov State U imeni Ivan Franko. L'vov, 1956. (Dissertation for the Degree of Candidate in Physicomathematical Sciences.)

SO: Knizhnaya Letopis', No. 26, 1956

S/878/62/000/001/001/003
D228/D307

AUTHOR: Giller, Ya.L.

TITLE: X-ray diagnostics of garnets

SOURCE: Ukraine. Glavnoye upravleniye geologii i okhrany nedr. Rentgenografiya mineral'nogo syr'ya. no. 1. Moscow, 1962, 79-96. Trudy Pervogo Vsesoyuznogo soveshchaniya v Kieve 25-29 sentyabrya 1959 g, 79-96

TEXT: Information is given about the lattice constants of pyrope, almandine, spessartine, grossular, uvarovite, andradite, hogarite, skiagite, calderite and blythite. It is based on an X-ray study of 50 chemically analyzed garnets and forms part of a more extensive study, whose results are to be published as a monograph. The lattice constants were calculated by means of V.I. Mikheyev's formula from a table of interplanar spacings, line intensities, and reflection plane indices, prepared from the data of a Debye powder pattern. The calculated values agree well with those that were determined experimentally. One criterion, assisting in the identification of

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X-ray diagnostics of garnets

S/878/62/000/001/001/003
D228/D307

garnets, is that on a Debye powder pattern of pyralspite garnet the line corresponding to plane (880) is the last bright line. Another intense line (12.0.0, 884) appears as the amount of ugrandite component increases, while a third line (12.2.2, 10.6.4) characterizes the predominance of andradite. There are 11 figures and 4 tables.

ASSOCIATION: L'vovskiy gosudarstvennyy universitet (Lvov State University)

Card 2/2

GILLER, Ya.L.; MERLICH, B.V.; SPITKOVSKAYA, S.M.

Hydroromeite from Transcarpathia. Min.sbor. no.14:285-296 '60. (MIRA 15:2)

1. Gosudarstvennyy universitet imeni Ivana Franko, L'vov.
(Transcarpathia--Hydroromeite)

GILLER, Ya.L.; PEKUN, Yu.F.

First All-Union Conference on the X-ray Study of Minerals, held in Kiev, September 25-29, 1959. Min.sbor. no.14:475-476 '60. (MIRA 15:2)

1. Gosudarstvennyy universitet imeni Ivana Franko, L'vov.
(Geology--Congresses)

S/126/61/011/002/022/025
E073/E335

24,7200 (1043, 1385, 1153)

AUTHORS: Gillor, Ya.L., Shmayevskiy, V.Ye. and Vadets, D.I.

TITLE: Investigation of the Pseudobinary Section ZnSb-CdSb by the Debye Method

PERIODICAL: Fizika metallov i metallovedeniye, 1961, Vol. 11, No. 2, pp. 311 - 313

TEXT: The pseudobinary section between the two semiconductor compounds ZnSb and CdSb contains a number of semiconductor alloys (Refs. 1, 2). Only the extreme compounds of this section have been investigated by X-ray structural analysis, namely, the compounds ZnSb and CdSb (K.E. Almin, Acta chem.scand., 1948, 2, 400 - Ref. 3). The work described in this paper is a first attempt to apply X-ray structural analysis for investigating the entire section under consideration. As starting materials 99.999 and 99.99% Sb were used. According to spectrum analysis the Cd has the following admixtures: Pb thousandths %; Cu tenths %; Ag hundredths % and Ca tenths %. The materials were weighed with an accuracy of 1 mg and mixed in the ratios enumerated in Table 1 (the second and third columns give the

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composition in molecular %, the fourth and fifth columns in weight %). Fusion was carried out in porcelain crucibles in an electric muffle furnace under a flux consisting of a mixture of KCl and NaCl. The melt was intensively mixed with a graphite rod and then teemed in an iron mould. Homogenisation was effected in sealed pyrex ampules (these were first evacuated to 10^{-1} to 10^{-2} mm Hg) and following that for 100 hours at 240-270 °C. From the homogenised alloys powder was produced which was tempered in evacuated sealed glass ampules at 200 °C for 50 hours, which were then allowed to cool down with the furnace. From the thus-produced powder, 0.9 mm dia. cylindrical specimens were produced. The investigation was by means of УРС-10 (URS-70) apparatus, using copper radiation without a filter. A voltage of 35 kV and current intensity of 12 mA were applied to the tube, the exposure time being 7 hours. The chamber diameter was 86 mm. Under equal conditions, X-ray patterns of the starting components were produced. The distance between identical lines of the diffraction patterns

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Table 1:

Таблица 1

№ образца	Состав образца, молек. %		Состав образца, вес. %	
	ZnSb	CdSb	ZnSb	CdSb
1	100	—	100	—
2	90	10	87,8	12,2
3	80	20	76,2	23,8
4	70	30	65,1	34,9
5	65	35	59,7	40,3
6	60	40	54,5	45,5
7	55	45	49,4	50,6
8	50	50	44,4	55,6
9	45	55	39,5	60,5
10	40	60	34,8	65,2
11	35	65	30,1	69,9
12	30	70	25,5	74,5
13	20	80	16,7	83,3
14	10	90	8,2	91,8
15	—	100	—	100

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Table 2:

Lattice constants Таблица 2

№ образца	Значения постоянных решетки, кХ			
	a	b	c	V, (kX)³
1	6,145	7,715	7,805	370,085
2	6,170	7,750	7,895	377,470
3	6,190	7,785	7,945	383,060
4	6,230	7,840	7,965	389,235
5	6,245	7,865	7,995	392,915
6	6,250	7,910	8,045	397,790
7	6,290	7,970	8,070	404,690
8	6,295	7,975	8,075	405,460
9	6,310	8,005	8,110	409,660
10	6,310	7,985	8,100	408,045
11	6,330	8,055	8,135	414,620
12	6,340	8,065	8,155	417,035
13	6,375	8,125	8,195	424,395
14	6,400	8,175	8,240	431,090
15	6,415	8,200	8,255	434,210

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was measured with an accuracy up to 0.1 mm. The relative intensity of the lines was determined visually by means of a 10-unit scale. Recording (identification) of the X-ray diffraction patterns of ZnSb and CdSb was by the method of selection. The obtained hkl indices did not contradict the conditions of extinction for the space group $D_{2h}^{15} - P_{bca}$. No Cd, Zn and Sb lines were detected on the X-ray diffraction patterns. Comparison of the X-ray diffraction patterns of ZnSb and CdSb with those of intermediate alloys has shown that throughout the entire section the structure of these alloys does not change and the same applies to the space group. This fact enabled choosing indices for the diffraction patterns of the alloys of the entire ZnSb-CdSb section on the basis of the ratio of the intensities of the lines and the interplane distances. The lattice constants a, b, c were calculated by the method of least squares on the basis of general indices for all the alloys starting from $\Theta = 25^{\circ}$. The calculated lattice constants and the determined volume of the elementary cell for all the alloys are entered in Table 2

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(lattice constants, kX). The accuracy of the determinations was 0.005 kX. The obtained results, presented in plots as functions of the lattice parameter; Fig. 1, and of the elementary volume, Fig. 2, on the CdSb concentration (molec%), are curves with a hardly noticeable bend for a concentration of about 50 molec% ZnSb. This leads to the assumption of a process of ordering of the solid solution.
There are 2 figures, 2 tables and 3 references:
2 Soviet and 1 non-Soviet.

ASSOCIATION: L'vovskiy gosudarstvennyy universitet im. Iv. Franko (L'vov State University im. Iv. Franko)

SUBMITTED: June 27, 1960

Card 6/6

GILLER, Ya.L.

X-ray determination of garnets. Rent.min.syr. no.1:79-96 '62.
(MIRA 16:3)

1. L'vovskiy gosudarstvennyy universitet.
(Garnet--Analysis) (X-ray crystallography)

GILLER, Ya.L.; BOBROVNIK, D.P.; GORETSKIY, V.A.; GORZHEVSKIY, D.I.; KOLTUN, L.I.; LAZARENKO, Ye.K.; LAZKO, Ye.M.; REZVOY, D.P.

Gugo Leonardovich Piotrovskii; obituary. Min. sbor. no.16: 456-458 '62. (MIRA 16:10)

(Piotrovskii, Gugo Leonardovich, 1897-1962)

GILLER, Ya.L.; SPITKOVSKAYA, S.M.

X-ray characteristics of hatchettite from Transcarpathia. Rent. min.syr. no.3:71-72 '63. (MIRA 17:4)

1. L'vovskiy gosudarstvennyy universitet.

ACC NR:AP7006269 SOURCE CODE: UR/0425/66/009/012/0032/0036

AUTHOR: Giller, Yu. Ye.; Khaitova, L. T.

ORG: Institute of Plant Physiology and Biophysics, AN TadzSSR (Institut fiziologii i biofiziki rasteniy AN TadzSSR)

TITLE: Optical properties of a synthetic pigment-lipoprotein complex

SOURCE: AN TadzhSSR. Doklady, v. 9, no. 12, 1966, 32-36

TOPIC TAGS: photosynthesis, photosynthesis pigment, chlorophyll, carotene, lipid, protein, synthetic photosynthesis complex, pigment lipoprotein complex, optic property

ABSTRACT: The results are reported of a study of the spectral properties of a synthetic complex of pigments which perform photosynthesis in plants (chlorophylls a and/or b, carotene) with mill protein. This complex also contained lipids. Thus, this artificial system was similar in composition to natural chloroplast pigment-protein-lipid complexes. The preparation of the complex is described in the article by Sapozhnikov, D. I., D. Tolibekov and Yu. Ye. Giller (AN TadzSSR, Izv., Otd. Biologicheskikh nauk, No. 2(23), (1966),48). Chromatographically purified pigments of spectroscopic purity grade and acetone extracts of

Card 1/3 UDC: none

dried nettle leaves were used for the study. Spectra of diffused reflection, and fluorescent spectra were recorded and studied. The results obtained were compared with the spectra of the live Tradescantia leaves or absorption spectra of the pigments in acetone solution. The dependence of the position of the spectral maxima and minima on the pigment concentration was determined. The results obtained, i.e., the shift of the minima of the reflexion spectra and of the maxima of the fluorescent spectra toward the red end indicate that the spectral properties of the synthetic complex are similar to those of the live green leaves. With respect to numerical values of the ratios of the intensities of the long-wave and the short wave maxima in the fluorescent spectra, the synthetic complexes stand between the chlorophyll solutions and live green leaves. The alternative increase and decrease of the intensity of the short-wave maximum in the fluorescent spectra which take place with a decrease in concentration indicate that an aggregate form of chlorophyll is present in the complex together with the monomer form: the above-mentioned fluctuations in the intensity are caused by the readsorption phenomenon and by the fluctuating in the concentration of the fluorescent monomer form. The red shift in the spectra of the complex is analogous to that of chlorophyll adsorbed on

ACC NR: AP7006269

various carriers such as polymers or magnesium oxide previously observed by other authors. In the case of adsorbed pigment, a similar aggregation of the latter takes place. Orig. art. has: 3 figures. Presented by Corresponding Member of the Tadzhik Academy of Sciences A. A. Adkhamovyy on 19 Mar 66.

[BN]

SUB CODE: 06, 07/ SUBM DATE: 19Mar66/ ORIG REF: 016/ OTH REF: 001

Card 3/3

NASYROV, Yu.S., otv. red.; SAPOZHNIKOV, D.I., red.; PROKOF'YEV, A.A., red.; ZALENSKIY, O.V., red.; MAKSUMOV, A.N., red.; KARIMOV, Kh.Kh., red.; LOGINOV, M.A., red.; GILLER, Yu.Ye., red.; USMANOV, P.D., red.; KAS'YANENKO, A.G., red.; RAKHMANINA, K.P., red.

[Contribution of plant physiology to agriculture; problems of photosynthesis and metabolism] Fiziologiia rastenii - sel'skomu khoziaistvu; voprosy fotosinteza i obmena veshchestv. Dushanbe, Izd-vo AN Tadzhikskoi SSR, 1965. 131 p. (MIRA 18:4)

1. Akademiya nauk Tadzhikskoy SSR, Dushanbe. Institut fiziologii i biofiziki rastenii.

NASYROV, Yu.S.; GILLER, Yu.Ye.; LOGINOV, M.A.; LEBEDEV, V.N.

Using C^{14} for studying the photosynethetic balance in the plants of phytocoenoses. Bot.zhur. 47 no.1:96-99 Ja '62.
(MIRA 15:2)

1. Laboratoriya fiziologii i biofiziki rasteniy AN Tadzhikskoy SSR, Dushanbe.
(Plant communities) (Photosynthesis)

NASYROV, Yu.S.; ABDURAKHMANOVA, Z.N.; GILLER, Yu.Ye.

Interrelation between the photosynthesis and water metabolism in plants. Trudy Otd. fiziol. i biofiz. rast. AN Tadz. SSSR no.3:3-12 '63. (MIRA 16:9)

GILLER, Yu.Ye.

Effect of mineral nutrition on the optical characteristics of leaves. Trudy Otd. fiziol. i biofiz. rast. AN Tadzh. SSSR no.3:53-61 '63. (MIRA 16:9)

GILLER, Yu.Ye.

Photoreactivation spectrum of changes in the optical system of plant leaves caused by long-wave ultraviolet radiation. Dokl. AN Tadzh.SSR 8 no.9:32-35 '65.

(MIRA 18:12)

1. Institut fiziologii i biofiziki rasteniy AN Tadzhikskoy SSR. Submitted April 27, 1965.

L 13624-65 Pa-4/Pb-4 SSD/AMD/AFWL/AS(mp)-2/ESD(t)
ACCESSION NR: AR4045749 S/0299/64/000/013/G003/G003

SOURCE: Ref. zh. Biologiya. Svodnyy tom, Abs. 13G14

AUTHOR: Giller, Yu. Ye.

TITLE: Optical property changeability limits of plant leaves in ontogenesis and under the effect of external conditions

CITED SOURCE: Dokl. AN TadzhSSR, v. 6, no. 9, 1963, 38-41

TOPIC TAGS: optical property, ontogenesis, plant external factor, plant leaf, mesophyll plant, cotton, corn, photosynthesis, pigment, tissue hydration, energy absorption

TRANSLATION: The subject plants grown in vessels were high mountain mesophyll plants and also cotton and corn. Changes in radiant energy absorption by plant leaves in ontogenesis corresponded to changes in photosynthesis intensity, pigment levels, tissue hydration, and dry matter content. The limits of absorption changes in the 400 to 700 millimicron region were 11% on the average. Under the vegetative experiment conditions, less marked changes are observed in

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L 13624-65
ACCESSION NR: AR4045749

leaf energy absorption (5%), but the general nature of the changes - the presence of a peak at the most active period of the plant (flowering and fruit bearing phases) - was preserved. During various mineral nutrition conditions the energy absorption values of the cotton plant comprise 3 to 4.5% and those of corn comprise 7 to 9%. With soil moisture change, total absorption changes are 2% for the cotton plant and 6% for the corn. Changes in leaf energy absorption capacity are less under the effect of external factors than in plant ontogenesis.

SUB CODE: LS ENCL: 00

Card 2/2

GILLEVICH, V.A., insh.

Process of weld joint formation in projection welding. Svar. proizv. no.7:8-11 Jl '60. (MIRA 13:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut elektrosvarochnogo oborudovaniya.
(Electric welding)
(Plates, Iron and steel--Welding)

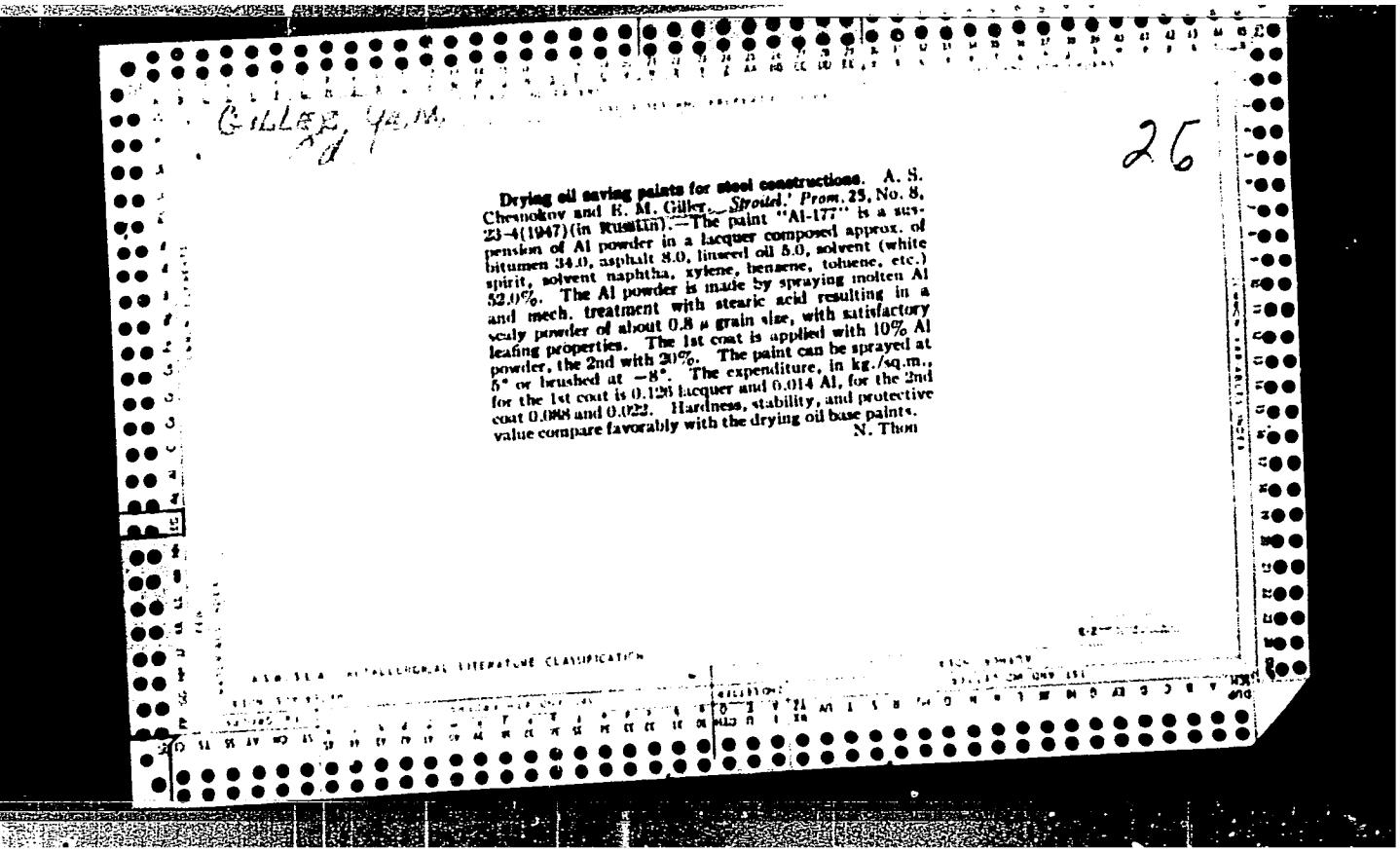
GILLER, V. Ye.

Tuberculosis of the stomach. Khirurgiia no.7:86 Jl '55.
(STOMACH--TUBERCULOSIS) (MLRA 8:12)

GILLER, Ye.K.

GILLER, Ye.K.; KOBAKHIDZE, N.G.

Diagnostic value of certain liver function tests in Botkin's disease.
Lab.delo 3 no.5:43-47 S-O '57. (MIRA 11:2)
(HEPATITIS, INFECTIOUS) (MEDICAL TESTS)



GILLER, Ya.M.

26

Drying oil saving paints for steel constructions. A. S. Chesnokov and E. M. Giller. *Stroitel.' Prom.* 25, No. 8, 23-4(1947)(in Russian).—The paint "Al-177" is a suspension of Al powder in a lacquer composed approx. of bitumen 34.0, asphalt 8.0, linseed oil 5.0, solvent (white spirit, solvent naphtha, xylene, benzene, toluene, etc.) 52.0%. The Al powder is made by spraying molten Al and mech. treatment with stearic acid resulting in a scaly powder of about 0.8 μ grain size, with satisfactory leafing properties. The 1st coat is applied with 10% Al powder, the 2nd with 20%. The paint can be sprayed at 5° or brushed at −8°. The expenditure, in kg./sq.m., for the 1st coat is 0.126 lacquer and 0.014 Al, for the 2nd coat 0.088 and 0.022. Hardness, stability, and protective value compare favorably with the drying oil base paints.
N. Thon

GILLER Ye.M.

TSAL'MAN, L.B., inzhener; CHESNOKOV, A.S., kandidat tekhnicheskikh nauk; PETROV, A.M., inzhener; GILLER, Ye.M., inzhener; KOVAL'CHUK, M.P., inzhener, redaktor; PETROVA, V.V., redaktor izdatel'stva; LAGUTINA, I.M., tekhnicheskiy redaktor

[Instructions for making steel structures of low-alloy steel, type NL2 (I221-56/MSPMKhP)] Instruktsiia po izgotovleniiu stal'nykh konstruktsii iz nizkolegirovannoi stali marki NL2. (I 221-56/MSPMKhP). Moskva, Gos. izd-vo lit-ry po stroit. i arkhit., 1957. 29 p. (MIRA 10:11)

1. TSentral'naya nauchno-issledovatel'skaya laboratoriya stal'nykh sooruzheniy Gosudarstvennogo proyektnogo instituta Proyektstal'konstruktsii Minmetallurgkhimstroya SSSR (for TSal'man, Chesnokov, Petrov, Giller). 2. Russia (1923- U.S.S.R.) Ministerstvo stroitel'stva predpriiatiy metallurgicheskoy i khimicheskoy promyshlennosti. Tekhnicheskoye upravleniye. 3. Otdel normativnykh dokumentov Tekhnicheskogo upravleniya Ministerstva stroitel'stva predpriyatiy metallurgicheskoy i khimicheskoy promyshlennosti SSSR (for Koval'chuk)

(Steel alloys) (Welding)

RYABOV, Aleksandr Fedorovich; CHESNOKOV, A.S., nauchnyy red.; GILLER, Ye.M., nauchnyy red.; OSTROVA, I.M., red.; VLADIMIROVICH, A.G., red.; TOKER, A.M., tekhn.red.

[Making steel construction elements] Izgotovlenie stal'nykh konstruktsii. Izd.2., perer. i dop. Moskva, Vses.uchebno-pedagog. izd-vo Trudrezervizdat, 1958. 367 p. (MIRA 12:3)
(Steel, Structural)

GILLER, Ye.Ye., polkovnik meditsinskoy slushby; LILUASHVILI, S.I., podpolkovnik meditsinskoy sluzhby

Set for making simultaneous blood collections. Voen.-med. zhur. no. 4:77 Ap '56. (MLRA 9:9)
(LABORATORIES--APPARAUTS AND SUPPLIES)
(BLOOD--COLLECTION AND PRESERVATION)

GILLER, Ye.Ye., polkovnik med.sluzhby; KOBAKHIDZE, N.G.

Aldolase in infectious hepatitis. Voen.-med. zhur. no. 2:78 F '61.
(MIRA 14:2)

(ALDOLASE) (HEPATITIS, INFECTIOUS)

GILLERSON, A. B.

42769. GILLERSON, A. B. Organizatsiya Bor'by S Zhenskim Besplodiyem V Poslevoyennoye Vremya V SB: Med.-San. Posledstviya Voyny I Meropriyatiya Po Ikh Likvidatsii. T. I. M., 1948, s. 61-67.

SO: Letopis' Zhurnal'nykh Statey, Vol. 7, 1949

ANDROSOVA, Ye.N.; GILLERSON, A.B., professor, zaveduyushchiy.

Diagnosis and therapy of malignant tumors of the ovaries. Akush. i gin. no.3:50-54 My-Je '53. (MLRA 6:7)

1. Kafedra akusherstva i ginekologii Omsk[illegible] meditsinskogo instituta imeni M.I.Kalinina. (Ovaries--Tumors)

USSR / General Problems of Pathology. Tumors. Human Neoplasm. U-4

Abs Jour : Ref Zhur - Biol., No 20, 1958, No 93981

Author : Gillerson, A. B.
Inst : Not given
Title : Clinical, Diagnostic, and Therapeutic Aspects of Hormone-Producing Ovarian Tumors.

Orig Pub : V sb.: Aktual'n. vopr. akusherstva i ginekol. M., 1957, 250-263.

Abstract : No abstract given

Card 1/1

17

GILLERSON, A. B., professor; BAKIYEVA, R. G., dotsent

Rupture of the uterus; based on materials from obstetrical and gynecological clinics of the Omsk State Kalinin Medical Institute. Vop.okh.mat. i det. 2 no.4:57-61 Jl-Ag '57. (MLRA 10:9)
(UTERUS--RUPTURE)

GILLERSON, A.B., professor; BAKIYEVA, R.G., dotsent

Uterine rupture following cesarean sections [with summary in English]
Akush. i gin. 33 no.2:59-62 Mr-Ap '57. (MLRA 10:6)

1. Iz kafedry akusherstva i ginekologii (zav. - prof. A.B.Gillerson) Omskogo gosudarstvennogo meditsinskogo instituta imeni M.I.Kalinina.
(CESAREAN SECTION, compl.
rupt. of uterus in subsequent labor)
(LABOR, compl.
rupt. of uterus after previous cesarean section)
(UTERUS, rupture
in labor, after previous cesarean section)

GILLERSON, A.B., prof., VOTYAKOVA, Ye.K.

Gonadotrophic hormone content of the amnictic fluid in various periods of pregnancy. Akush. i gin. 34 no.4:87-89 Jl-Ag '58 (MIRA 11:9)

1. Iz kafedry akusherstva i ginekologii (zav. - prof. A.B. Gillerson) Omskogo meditsinskogo instituta imeni M.I. Kalinina.

(AMNIOTIC FLUID
gonadotropic hormones at various periods of pregn.(Rus))
(GONADOTROPIN, determ.
in amniotic fluid at various periods of pregn. (Rus))

GILLERSON, A.B.; PSHENICHNIKOVA, A.S.

Significance of a cytological method in the diagnosis of pre-invasive forms of cancer of the cervix uteri. Akush. i gin. 36 no.3:50-54 My-Je '60. (MIRA 13:12)
(UTERUS—CANCER)

GILLERSON, A.B., prof.; VOTYAKOVA, Ye.K.

Gonadotropic activity in the blood serum, urine and amniotic fluid in pregnant women. Akush.i gin. 36 no.5:16-19 S-O '60. (MIRA 13:11)

1. Iz kafedry akusherstva i ginekologii (zav. - prof. A.B. Gillerson) Omskogo meditsinskogo instituta imeni M.I. Kalinina.
(GONADOTROPIN) (PREGNANCY)

GILLERSON, A.B.; BAKIYEVA, R.G.; BURMATOV, D.A., zasluzhennyy vrach RSFSR

Some etiological, clinical and therapeutic problems in uterine rupture. Vop. okh. mat. i det. 6 no.5:63-67 My '61. (MIRA 14:10)

1. Iz kafedry akusherstva i ginekologii (zaveduyushchiy - prof. A.B. Gillerson) Omskogo meditsinskogo instituta imeni M.I.Kalinina.
(UTERUS--RUPTURE) (CESAREAN SECTION)

GILLERSON, A.B., prof.; PSHENICHNIKOVA, A.S.

Effectiveness of diathermocoagulation in the "cervical" form of sterility. Vop. okhr. mat. i det. 6 no.6:44-47 Je '61. (MIRA 15:7)

1. Iz kafedry akusherstva i ginekologii (zav. - prof. A.B. Gillerson) Omskogo meditsinskogo instituta imeni M.I. Kalinina.
(STERILITY) (ELECTROSURGERY)

GILLERSON, A.B., prof.

Problem of the course of pregnancy and labor following commissurotomy. Akush. i gin. 38 no.5:93-95 S-O '62.
(MIRA 17:11)

1. Iz kafedry akusherstva i ginekologii (zav. - prof. doktor med. nauk A.B. Gillerson) Omskogo meditsinskogo instituta imeni Kalinina.

GILLERSON, A.B., prof. doktor med. nauk; PSHENICHNIKOVA, A.S.

Course of pregnancy and labor after diathermycoagulation of the cervix uteri. Akush. i gin. no.1:64-67 '63. (MIRA 17:6)

1. Iz kafedry akusherstva i ginekologii (zav. - prof. A.B. Gillerson) Omskogo meditsinkogo instituta imeni M.I. Kalinina.

GILLERSON, A.B. (Omsk)

Diagnosis of uterine cancer. Akush. i gin. 40 no.4:125-130 Jl-Ag '64. (MIRA 18:4)

16(1),16(2) SOV/43-59-7-14/17

AUTHOR: Gillert,G.

TITLE: Estimation of the Measurements of Hirizontal Angles According to the Method of Gauss-Schreiber (Confidence Ellipsoid) (Otsenivaniye izmereniy gorizontal'nykh uglov po sposobu Gausse-Shreybera (doveritel'nyy ellipsoid))

PERIODICAL: Vestnik Leningradskogo universiteta, Seriya matematiki, mekhaniki i astronomii, 1959, Nr 7(2), pp 140-142 (USSR)

ABSTRACT: Given the point O and the directions OA_i. Sought: $h_i = \sphericalangle A_{i-1}OA_i$. Taking as elements the angles $\alpha_i = \sphericalangle A_0OA_i$, then $h_i = \alpha_i - \alpha_{i-1}$. Usually the confidence intervals are constructed separately for α_i and h_i. The author uses results of Yu.V.Linnik [Ref 1,2] and states that for the estimation of the h_i a confidence ellipsoid can be given where it is identical with the confidence ellipsoid for all α_i.

There are 4 Soviet references.

SUBMITTED: June 3, 1958

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16(1), 16(2)

AUTHOR: Gillert, G. SOV/43-59-7-15/17

TITLE: Bearing in the Space With Range Measurement (Pryamaya zasechka v prostranstve s izmereniyem rasstoyaniya)

PERIODICAL: Vestnik Leningradskogo universiteta, Seriya matematiki, mekhaniki i astronomii, 1959, Nr 7(2), pp 143-145 (USSR)

ABSTRACT: Given n fixed points $A_i(x_i, y_i, z_i)$ with known coordinates; the coordinates of the point $O(x_o, y_o, z_o)$ are sought. By direct application of the results of Yu.V.Linnik [Ref 2] the author constructs a confidence ellipsoid containing the point $O(x_o, y_o, z_o)$ with the probability p_o.

There are 3 references, 2 of which are Soviet, and 1 American.

SUBMITTED: June 3, 1958

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1.2300

26436
S/135/61/000/009/001/006
A006/A101

AUTHOR: Gillevich, V.A., Engineer

TITLE: Projection welding of [illegible](D16A-BM) alloy parts

PERIODICAL: Svarochnoye proizvodstvo, no. 9, 1961, 4 - 6

TEXT: In projection welding of aluminum alloy parts with protrusion of conventional shape (Fig. 1a) stable results are not obtained and this method can not be recommended for industrial use. Therefore an investigation was made at VNIIESO on projection welding of alloy parts having protrusions without a hole in the back of the sheet to be welded (Fig. 1b). Such protrusions are produced during press forming or other processes. Press-formed D16A-BM alloy parts with 1.6 mm thick shelves were welded onto 1 mm thick sheets of the same material. The parts had 4 spherical protrusions of 3.5 mm base diameter and 1 mm height. The effect of the electrode material and of drive inertia on the welding process were studied and the following conditions were established for welding 2 and 4 protrusions simultaneously. For the former case the conditions were as follows: a.c of 80 kamp intensity; 600 kg electrode force, 0.06 sec welding time; the time of increase of the welding current from $I_{weld_{initial}} = 0.4\ I_{weld_{max.}}$ to the

Card 1/2

Projection welding ...

final value was 0.04 sec. Smooth increase of the effective value of the welding current at the beginning of the pulse (modulation) is necessary. If modulation is absent, electrode burning, splashing and poor penetration occurs. An experimental single-phase machine was employed. For welding-on 4 protrusions simultaneously, a low-frequency three-phase projection press of the МРПИ-1800 (MRPI-1800) type was employed, which was manufactured at VNIIESO and mounted at one of the "Svetlana" Plant shops. Electrode force was 1,200 kg, current intensity 140 kamp, welding time 0.07 sec; time of current increase from zero to the maximum value was 0.03 sec. The electrodes on the side of sheets without protrusions should be manufactures of copper alloy having not less than 100 HB hardness. Machines with light movable parts of electrode drive are recommended. There are 4 figures and 1 Soviet-bloc reference.

ASSOCIATION: VNIIESO

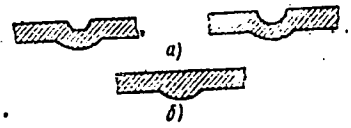

Figure 1: Types of protrusions (projections); a - conventional type employed in projection welding; b - without holes on the reverse side.

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GILLEVICH, V.I., inzh.; DUKOV, V.S.

Drying of electrodes for arc welding by the resistance heating method. Svar. proizv. 12:30-32 D '65. (MIRA 18:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut elektrosvarochnogo oborudovaniya.

GIL'M KAMAY;

SEE KAMAY, Gil'm Khayrevich

L 46322-66 EWT(m)/EWP(j) RM

ACC NR: AP5025128 SOURCE CODE: UR/0079/65/035/010/1811/1814

AUTHOR: Tsivunin, V. S.; Gil'm Kamay; Shagidullin, R. R.; Khisamutdinova, R. Sh.

ORG: none

TITLE: Condensation reaction of diethyl(diphenyl)chlorophosphine with α,β -dichloroethylalkyl ethers

SOURCE: Zhurnal obshchey khimii, v. 35, no. 10, 1965, 1811-1814

TOPIC TAGS: condensation reaction, ether, chemical reaction, DIETHYL ETHER, DIPHENYL compound

ABSTRACT: Diethyl- and diphenylchlorophosphine formed with α,β -dichloroethylbutyl ether a complex as expected from their reaction with α -chloroethylalkyl ether, but hydrolysis or alcoholysis of the reaction product was followed by dehydrochlorination to give diethyl- and diphenyl- α -butoxyvinylphosphine oxide, respectively. Similarly, complex formation of diphenylchlorophosphine with α -chloroethyl- β -chloroethyl ether, alcoholysis and thermal dehydrochlorination during distillation produced diphenyl-α-vinyloxyethylphosphine oxide. Hydrolysis of diethyl- α-butoxyvinylphosphine oxide gave diethylacetylphosphine oxide, and infrared spectroscopy of the latter indicated its enol-ketol tautomerism. The starting compounds reacted under cooling in a CO_2 atmosphere at 0°C to give viscous complexes, and

UDC: 546.185+547.431.4:541.49

Card 1/2

L 46322-66

ACC NR: AP5025128

alcoholysis or hydrolysis, vacuum distillation, and recrystallization produced the unsaturated phosphine oxides. Physical properties and elemental composition of all products were determined. Orig. art. has: 1 figure.

SUB CODE: 07/ SUBM DATE: 29Sep64 / ORIG REF: 003

Card 2/2 egh

L 36490-66 EWT(m)/EWP(j) RM

ACC NR: AP6027081 SOURCE CODE: UR/0079/65/035/010/1815/1817

AUTHOR: Tsivunin, V. S.; Gil'm Kamay; Khisamutdinova, R. Sh.

ORG: none

TITLE: Synthesis of thiooxides of diethyl(diphenyl)-alpha-(alkoxy)ethyl-phosphines, alpha-(alkoxy)vinylphosphines, and alpha-(vinyloxy)ethyl-phosphines

SOURCE: Zhurnal obshchey khimii, v. 35, no. 10, 1965, 1815-1817

TOPIC TAGS: chemical synthesis, organic phosphorus compound, chemical decomposition, hydrogen sulfide, chlorination, distillation, chemical bonding, bromination, hydrolysis

ABSTRACT: Study of complexing between secondary chlorophosphines and α-chloro ethers, the authors investigated the decomposition of the corresponding complexes with hydrogen sulfide. The overall process is represented as follows:

$$R_2PCl + CH_2X-CHCl-OR' \longrightarrow R_2\overset{+}{P}-\underset{Cl}{\overset{Cl^-}{CH}}-\underset{OR'}{CH_2X} \xrightarrow{+H_2S} R_2P(S)-\underset{OR'}{CH}-CH_2X + 2HCl.$$

X = H or Cl. R = C_6H_5 or C_6H_{11}, R' = C_4H_9

As in the case of oxides, after decomposition of the complex of diethyl(diphenyl)-α-butoxychloroethyldichlorophosphine, thermal dehydrochlorination occurs during distillation:

UDC: 546.185:541.49+546.221

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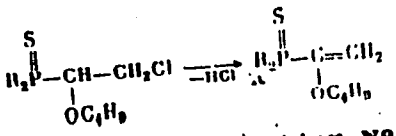
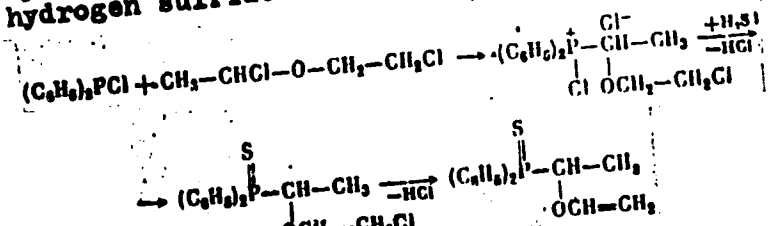
L 36490-66

ACC NR: AP6027081



A similar thermal dehydrochlorination was observed as a result of distillation of the product following decomposition of the complex between diphenylchlorophosphine and α-chloroethyl β-chloroethyl ether by hydrogen sulfide. The following reaction occurred:



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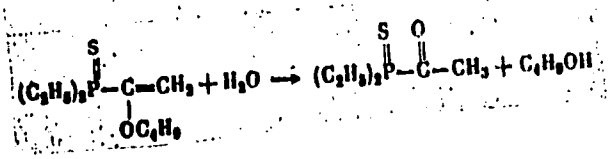
L 36490-66

ACC NR: AP6027081

The presence of a double bond was confirmed by a qualitative bromination reaction. Diethyl-α-butoxyvinylphosphine thiooxide hydrolyzed readily to form diethylacetylphosphine thiooxide:



$$(C_2H_5)_2P(S)-C(OC_4H_9)=CH_2 + H_2O \rightarrow (C_2H_5)_2P(S)-C(=O)-CH_3 + C_4H_9OH$$

[JPRS: 36,328]

SUB CODE: 07 / SUBM DATE: 29Sep64

Card 3/3

GIL'MAN, A.

Possibility of using machines in technology and in setting up work standards. Sots.trud no.6:87-91 Je '57. (MLRA 10:7)
(Electronic calculating machines) (Technology)
(Production standards)

GIL'MAN, A.

Use of electronic machines for designing technological processes and establishing work norms. Biul.nauch.inform.; trud. i zar. plata no.2:18-21 '59. (MIRA 12:5)
(Electronic calculating machines)
(Machinery industry--Production standards)

STAROSKOL'SKIY, A.A.; RATNOVSKAYA, Ye.D.; GIL'MAN, A.B.

Use of wetting agents in skein yarn mercerizing. Leg.prom.15 no.2: 47-50 F '55. (MLRA 8:4)
(Mercerization)

GIL'MAN, A. G.

35489. Pervichnaya torakoplastika. V SB: Voprosy grudnoy khirurgii. T. III. M., 1949, c. 152-59.

Letopis' Zhurnal'nykh Statey, Vol. 48, Moskva, 1949

GILMAN, A. G.

Keinbock or Alyshevsky's phenomenon. Probl. tuberk., Moskva no.4:42-44 July-Aug 1950. (CIML 20:1)

1. Of the Second Surgical Clinic (Head -- A. G. Gil'man), Institute of Climato-therapy of Tuberculosis (Director -- Docent V. F. Chernyshev; Scientific Director -- Docent A. V. Ovsyannikov).

GIL'MAN, A.G.; KHRAPUNOVA, N.V.; SHIFMAN, N.D.

First results of application of streptomycin in surgery of pulmonary tuberculosis. Probl. tuberk., Moskva no.4:54-59 July-Aug 1951. (CIML 21:1)

1. Of the Second Surgical Clinic (Head -- Doctor Medical Sciences A. G. Gil'man), Institute of Climatotherapy of Tuberculosis (Director -- Docent Ye. D. Petrov), Yalta.

GIL'MAN, A.G.

GIL'MAN, A.G.

Anesthesia and therapeutic protective inhibition in the postoperative stage in pulmonary tuberculosis. Probl. tub. no.1:25-28 Ja-F '55. (MLRA 8:4)

1. Is Instituta klimatoterapii tuberkuleza (dir. kandidat meditsinskikh nauk Ye.D.Petrov).

(TUBERCULOSIS, PULMONARY, surgery, anesth. & postop. care)
(ANESTHESIA, in tuberc., pulm., surg.)
(POSTOPERATIVE CARE, in tuberc., pulm., surg.)

GIL'MAN, A.G.; GOROVENKO, G.G.; SHEVCHENKO, K.A.; SUSLOVA, A.L.; KHMELEVSKAYA, G.A.

Comparative study of the status of tuberculosis following pulmonary resection under climatic conditions of the southern shore of the Crimea and the central part of the Ukraine. Probl.tub. no.1:52-60 '62. (MIRA 15:8)

1. Iz khirurgicheskoy kliniki (zav. - prof. A.G. Gil'man) Instituta meditsinskoy klimatologii i klimatoterapii imeni I.M. Sechenova (dir. B.V. Bogutskiy).
(TUBERCULOSIS) (LUNGS--SURGERY)

GIL'MAN, A.G., prof.; PERTSOVSKIY, A.I., kand. med. nauk

Dynamics of the correlations of serum protein fractions following resection of a segment or lobe of the lung in tuberculosis. clinicobiochemical parallels. Probl. tub. no.7:43-47 '64. (MIRA 18:10)

1. Institut meditsinskoy klimatologii i klimatoterapii imeni Sechenova (dir.-- B.V. Bogutskiy), Yalta.

GIL'MAN, A. I., Engineer

"A Report on Experience in Modernizing Milling Machines" Stanki I Instrument, 17, No. 12, 1946

BR-52059019

GIL'MAN, A.I.; ORKIN, V.I.

Universal V-shaped three-cam chuck. Mashinostroitel' no.9:31 S '63. (MIRA 16:10)

(Chucks)

GIL'MAN, Avram Il'ich; KOSTINA, V., red.

[Universal pneumatic lathe chucks] Universal'nye pnevmaticheskie tokarnye patrony. Saratov, Saratovskoe knizhnoe izd-vo, 1963. 111 p. (MIRA 17:7)

06523 SOV/141-58-1-13/14

AUTHOR: Gil'man, A. M.

TITLE: Some Characteristics of the Logical Structure of the GIFTI (Gor'kiy Physics-Engineering Research Institute) Computer and the Programming in Its Code. Part I.

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiofizika, 1958, Nr 1, pp 141-149 (USSR)

ABSTRACT: The computer was designed for the solution of the engineering problems of average complexity and the logical problems which arise in the machine building industry. The emphasis in the design was laid on the miniaturization. The computer is of the series type and has two kinds of internal memories. The basic memory consists of 1984 cells which are situated on the 31-path magnetic drum, while the special memory is in the form of the registers with re-circulation on the same drum. Each register has 2 cells, there being altogether 32 cells of the special memory. Each cell of the basic memory or of the special memory can contain one 32-bit word. The access time is on the average equal to one half revolution of the drum during the search in the basic memory and 1/128 revolution during the search in the special memory. The code of the computer is of the single-address type with regard to the basic memory and 3-address type with regard to the special

Card 1/3

Some Characteristics of the Logical Structure of the GIFTI (Gor'kiy Physico-Engineering Research Institute) Computer and the Programming of Its Code. Part I.

memory. It is possible to perform operations with 32- or 64-bit numbers. The point in the code of a number is fixed. The control code consists of 32 bits. The orders can be situated in any (odd or even) cells of the memory. One of the important characteristics of the machine is its method of performing the operations of re-addressing and reproduction. The order to be re-addressed which is standard in one of the cells of the memory, contains the initial address k_o . The contents of this cell during the re-addressing are not changed. The storage of the products ti (t is the step of the re-addressing and i is a parameter controlling the process of re-addressing) is done in special cells which are known as the re-addressing cells. The contents of these cells are independent of the position of the re-addressing order in the memory. During the insertion of the re-addressing order into the current-order register, the contents of the re-addressing cell are added to it, so that the re-address part

Some Characteristics of the Logical Structure of the GIFTI (Gor'kiy Physico-Engineering Research Institute) Computer and the Programming of Its Code. Part I.

of the order is equal to $k_o + ti$ after its insertion into the current-order register. The constants of the re-addressing are inserted into another group of special cells. The programming of the machine is based on the operatorial method of programming devised by A. A. Lyapunov (Refs 4, 5 and 6). The programming procedure is described in some detail. The control facilities of the machine consist of a set of control-pulse generators and a set of functional devices. General characteristics of these devices are discussed in some detail. The second part of the article is to deal with the setting of the programmes and the discussion of the code of the computer. The paper contains 1 figure, 1 table and 6 Soviet references.

ASSOCIATION: Issledovatel'skiy fiziko-tekhnicheskiy institut pri Gor'kovskom universitete (Physico-Engineering Research Institute of Gor'kiy University)

SUBMITTED: June 19, 1957.

Card 3/3